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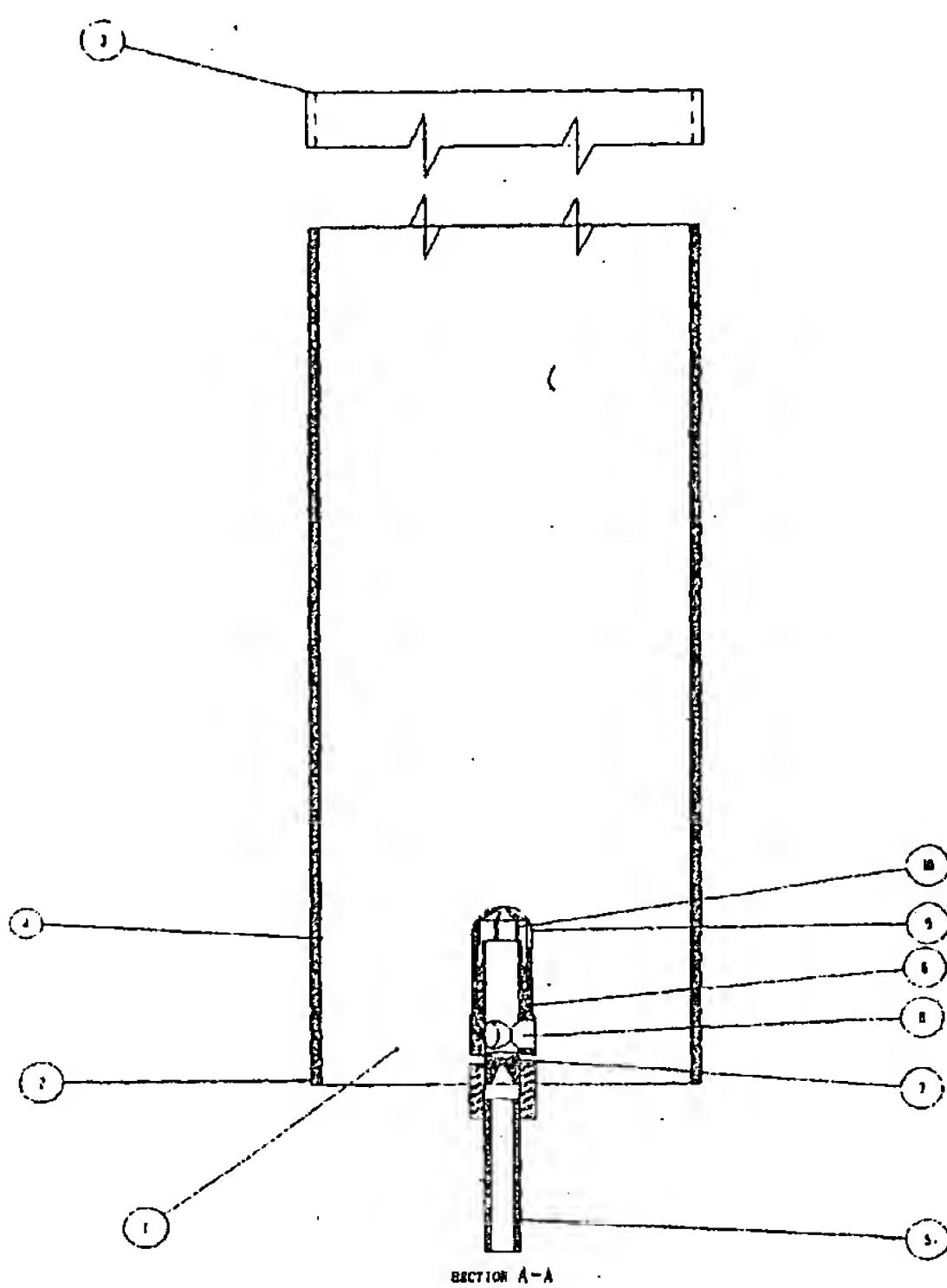
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(54) Title: TURBULENCE BURNER WITH VORTEX STRUCTURES



(57) Abstract: A fuel burning device includes a tubular combustion cylinder open at opposing first and second ends. A fuel inlet pipe has a first end extending through the first end of the combustion cylinder partially into the combustion cylinder and a second end extending outside of the combustion cylinder. The fuel burning device also includes a burner head connected to the first end of the fuel inlet pipe and an orifice connected between the burner head and the first end of the fuel inlet pipe. The burner head is structured and arranged so that combusted fuel discharged at the second end of said combustion cylinder has reduced CO and NOx emissions.

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